

## STRUCTURE S-235

This structure is a double-barreled concrete pipe culvert, located on the L-D3 Borrow Canal at C-43 (Caloosahatchee River) at Moore Haven, Florida. Control is effected by manually operated service gates.

### PURPOSE

This structure provides a secondary method of removal of irrigation return and flood flows from agricultural lands to the south and east. During major storms, discharge is made through L-D3 and L-D1 Borrow Canals to Pumping Station S-4.

### OPERATION

This structure is operated in conjunction with S-169, S-310, and the culverts in LD-1 to control water levels in the S-4 and Industrial Canal basins. Generally, S-235 is full open, except when the Lake Okeechobee stage is below 13.0. The relationship between these structures is shown in the following table:

LAKE OKEECHOBEE STAGE	GATE STATUS				NORMAL RANGE S-4 HW
	S-310	LD-1 Culverts**	S-235	S-169	
OVER 15.5	CLOSED	CLOSED	FULL OPEN	AUTO	11-14
14 - 15.5	FULL OPEN	CLOSED	FULL OPEN	CLOSED	11-14
13 - 14	FULL OPEN	CLOSED	FULL OPEN	CLOSED	11-14
BELOW 13	FULL OPEN	FULL OPEN	CLOSED	FULL OPEN	BELOW 13

### FLOOD DISCHARGE CHARACTERISTICS

#### Design

Discharge rate                      200 cfs  
    \*        % of SPF  
  
Headwater Elevation                13.0 feet  
Tailwater Elevation                12.5 feet

Type Discharge Uncontrolled submerged

\*Design flow not related to Standard Project Flood

\*\*LD-1 culverts include CV-1, CV-1A, CV-2

## DESCRIPTION OF STRUCTURE

Type concrete pipe culvert

Number of barrels: 2

Size of barrels: 6 feet

Length of barrels: 70 feet

Flow Line elevation 4.1 feet

Service bridge elevation 18.0 feet

Water level which will by-pass structure: 18.4 feet

Control Structure: Discharge is controlled by gates mounted on an upstream headwall. Access is via a concrete walkway.

Gates:

Number 2

Type: service gates mounted on headwall

Size: 6 foot diameter

Control: manual

Lifting Mechanism: hand crank operated gear lift

**ACCESS:** From S-77 and L-D3 via about 400 feet, or from U.S. 27 via about 2,000 feet of access road along south bank of C-43 (Caloosahatchee River.)

## HYDRAULIC & HYDROLOGIC MEASUREMENTS

Water Level: Upstream and downstream staff gauges only

Gate Position: None

**DEWATERING FACILITIES:** None